

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,370		10/14/2003	Katsuyasu Ito	CTW-025	6708
959	7590	08/24/2005	EXAMINER		INER
LAHIVE &		FIELD, LLP.	GRANT, ROBERT J		
BOSTON,)9		ART UNIT	PAPER NUMBER
•				2838	
				DATE MAILED: 08/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/686,370	ITO, KATSUYASU				
Office Action Summary	Examiner	Art Unit				
	Robert Grant	2838				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 10 June 2005.						
2a)⊠ This action is FINAL . 2b)☐ This	action is non-final.					
. —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) <u>1-13</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-3 and 10-13</u> is/are rejected. 7) ⊠ Claim(s) <u>4-9</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on 14 October 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) .	4) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(DTO 412)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	4) Interview Summary Paper No(s)/Mail Da	te				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P	atent Application (PTO-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 6,346,793) in view of Currier (US 5,107,075).

As for Claim 1, Shibata discloses a charger comprising: a housing (figure 1, element 1) including on an outside surface thereof a connecting portion (element 5) to which a battery pack is attached by a slide of the battery pack in a predetermined direction on the connecting portion (Column 5, lines 56-60); a plurality of terminals provided in the connecting portion (elements 11,12, and 13) for establishing electrical connection with the battery pack upon attachment of the battery pack to the connecting portion(Column 1, lines 61-66); urging means (figure 4, element 18); and protective means provided on the connecting portion(figure 4 element 14), the protective means is urged by the urging means to a covering position in which the protective means covers the terminals (column 6, lines 22-24), and when the battery pack is attached to the connecting portion, the protective means is adapted so as to be abutted and moved by the battery pack to a withdrawn position in which the terminals are exposed (column 6, lines 34-39). Shibata does not expressly discloses the protective means capable of

linear movement in the predetermined direction wherein under normal operating conditions. Currier a protective means capable of linear movement in the predetermined direction wherein under normal operating conditions (Figure 1). It would have been obvious to a person having ordinary skill in the art at the time of this invention to replace the pivotal terminal cover of Shibata with the linear terminal cover of Currier in order to avoid the complications of a cover that recesses inside of the charger body.

Page 3

As for Claim 2, which is dependent upon claim 1, Shibata discloses a charger comprising a terminal block on which the terminals are erected and oriented in the predetermined direction (column 5, lines 50-55), wherein the protective means is a slide cover including a top plate and a pair of side plates that extend orthogonally downwards from side edges of the top plate and are oriented in the predetermined direction (column 6, lines 1-3), the top plate being located directly over the terminals and the side plates flanking the terminals when no battery pack is attached to the charger (column 7, lines 35-42).

As for claim 3, which is dependent upon claim 2, Shibata discloses A charger wherein the urging means includes at least one coil spring interposed between the slide cover and a portion of the housing below the slide cover for urging the slide cover in the predetermined direction to the covering position (figure 9, element 28).

As for claim 10, which is dependent upon claim 1, Shibata discloses a charger further comprising guide means provided in the connecting portion for facilitating a

Art Unit: 2838

slide of the battery pack to bring the pack into attachment to the connecting portion (element 6).

As for claim 11, which is dependent upon claim 10, Shibata discloses a charger wherein the guide means includes a pair of guide rails extending in parallel with the predetermined direction, wherein the guide rails are adapted to receive the battery pack therebetween during attachment of the battery pack to the charger (Column 5, lines 26-31).

As for claim 12, which is dependent upon claim 11, Shibata discloses a charger wherein the terminals (Figure 1, elements 11,12,and 13) are located between the guide rails (element 6) (as seen in figure 1).

As for Claim 13, Shibata discloses a charger comprising: a connecting portion on which a battery pack is slid into attachment to the charger (Column5, lines 56-60); a plurality of terminals provided on the connecting portion for establishing electrical connection with the battery pack upon attachment of the battery pack to the connecting portion (column 1, lines 63-66); and a slide cover slidably attached to the connecting portion (figure 1, element 14), the slide cover being urged to a first position, in which the slide cover snugly covers the terminals (Column 6, lines 22-24), but being abutted by the battery pack to a second position, in which the slide cover no longer covers the terminals, during the attachment of the battery pack to the connecting portion (Column 6, lines 34-39). Shibata does not expressly disclose wherein the slide cover is linearly slid. Currier discloses a slide cover that is linearly slid (figure 1). It would have been

Application/Control Number: 10/686,370 Page 5

Art Unit: 2838

obvious to a person having ordinary skill in the art at the time of this invention to replace the pivotal terminal cover of Shibata with the linear terminal cover of Currier in order to avoid the complications of a cover that recesses inside of the charger body.

Allowable Subject Matter

3. Claims 4-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 10, and 13 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3 and 5 of U.S. Patent No. 6,346,793 in view of 5,107,075.

As to Claim 1, Shibata discloses in claim 3 a charger, housing, plurality of terminals, urging means, and protective means. Shibata does not disclose the protective means having linear movement. Currier discloses a protective means that has linear movement. It would have been obvious to a person having ordinary skill in the art at the time of this invention to replace the pivotal terminal cover of Shibata with the linear terminal cover of Currier in order to avoid the complications of a cover that recesses inside of the charger body.

As to Claim 10, Shibata discloses in claim 5 a means for facilitating a slide of the battery pack to bring the pack into attachment with the connecting portion.

As to Claim 13, Shibata discloses in claim 3 a charger, battery pack being slid into attachment, a plurality of terminals, a cover covering the terminals, and the battery pack abutting the cover to move the cover. Shibata does not disclose the cover being

been obvious to a person having ordinary skill in the art at the time of this invention to replace the pivotal terminal cover of Shibata with the linear terminal cover of Currier in order to avoid the complications of a cover that recesses inside of the charger body.

linearly slid. Currier discloses a protective means that is linearly slid. It would have

Response to Arguments

6. Applicant's arguments filed 6-10-05 have been fully considered but they are not persuasive. In response to the applicants arguments with regards to claims 1 and 13, which recite a lack of motivation for the combination of Currier's linear sliding cover with Shibata battery charger. The examiner stands by his original rejection. Currier teaches

Application/Control Number: 10/686,370

Art Unit: 2838

a cover which is linearly slideable in order to protect unwanted contact with the electrical terminal. It is obvious to one having ordinary skill in the art that Currier could have designed a cover that recessed into the wall, but such a system would be more complicated, and would require a more space and clearance. Therefore it is obvious to use a linear slideable cover for the protection of the electrical contacts.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Grant whose telephone number is 571-272-2727. The examiner can normally be reached on M-F 8:30-5.

Application/Control Number: 10/686,370

Art Unit: 2838

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Adolf Deneke Berhane Primary Examiner Page 8